



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,240	02/25/2004	Richard C. Holz	14185.6.1	2692

7590 02/07/2006

John C. Stringham
WORKMAN NYDEGGER
1000 Eagle Gate Tower
60 East South Temple
Salt Lake City, UT 84111

EXAMINER

CHU, YONG LIANG

ART UNIT

PAPER NUMBER

1626

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/786,240	Applicant(s) HOLZ ET AL.	
	Examiner Yong Chu	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 7, 13 and 19-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 11, 12, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/22/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-25 are pending in this application. Claims 7,13,19, and 20-25 are withdrawn from consideration. Claims 1-6, 8-12, and 14-18 are examined.

Information Disclosure Statement

Applicant's Information Disclosure Statements, filed on 22 November 2004 have been considered. Please refer to Applicant's copies of the PTO-1449 submitted herewith.

Priority

This application claims the benefit of U.S. Provisional Patent Application 60/491,074 filed on 30 July 2004.

Response to Restriction

The response to the restriction request with election of Group I (e.g. claims 1-6, 8-12, and 14-18) *without traverse* by Applicants' representative, Jonathan M. Bennis dated on 13 January 2006, has been considered.

In accordance with M.P.EP 821.04 and *In re Ochiai*, 71 F.3d 1565, 37 USPQ 1127 (Fed. Cir. 1995), rejoinder of product claims with process claims commensurate in scope with the allowed product claims will occur following a finding that the product claims are allowable. Until, such time, a restriction between product claims and process claims is deemed proper. Additionally, in order to retain the right to rejoinder in

Art Unit: 1626

accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution to maintain either dependency on the product claims or to otherwise include the limitations of the product claims. ***Failure to do so may result in a loss of the right to rejoinder.***

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Status of the Claims

Claims 1-25 are pending in this application. Claims 7,13,19, and 20-25 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention. The withdrawn subject matter is patentably distinct from the elected subject matter as it differs in structure and element and will require separate search considerations. In addition, a reference, which anticipates one group, would not render obvious the other. Claims 1-6, 8-12, and 14-18 are examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1626

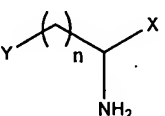
invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

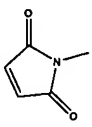
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

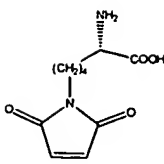
Claims 1-6 are rejected under 35 U.S.C. 103 (a) as unpatentable over Keller *et al.*, *Helvetica Chimica Acta* (1975), 58(2), 531-41 in view of *Organic Chemistry by McMurry 2nd edition on page 727 section 20.8, reduction of carboxylic acids to alcohol by LiAlH₄.*

Applicants instant elected invention in claims 1-2 teach compounds of the

formula, , depicted in claim 1, thereof wherein: X is selected from CH₂SH,

CH₂OH,...; Y is selected from COCZ, , ...; Z is selected from Cl, Br, and I; n is an integer.

Determination of the scope and content of the prior art (MPEP §2141.01)

Keller *et al.* teach a compound of formula  that read on the instant

application wherein X is -COOH; Y is  ; n is 4.

McMurry teaches a method to convert -COOH to CH₂OH using reduction reagent LiAlH.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the prior art of Maleoyl *et al.* and the instantly claimed compounds, is that X is -COOH of the compound of Maleoyl *et al.* is opposed to -CH₂OH of the instantly claimed compounds.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

One skilled in the art would have found the claimed compound prima facie obvious because the instant claimed compounds can be made by converting the compound disclosed by Maleoyl *et al.* using the method disclosed in McMurry's text book with expectation of success. In *re Wood*, 199 U.S.P.Q. 137 (C.C.P.A. 1978) and In *re Lahr*, 137 U.S.P.Q. 548, 549 (C.C.P.A. 1963).

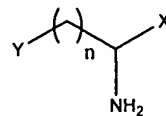
Claims 3 and 4 are rejected because the patentability of the compositions depends on the novelty and non-obvious of the compounds in claims 1-2. Since the compound claims are rejected, so are the compositions.

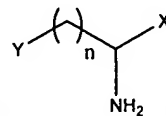
Claim Rejections - 35 USC § 112

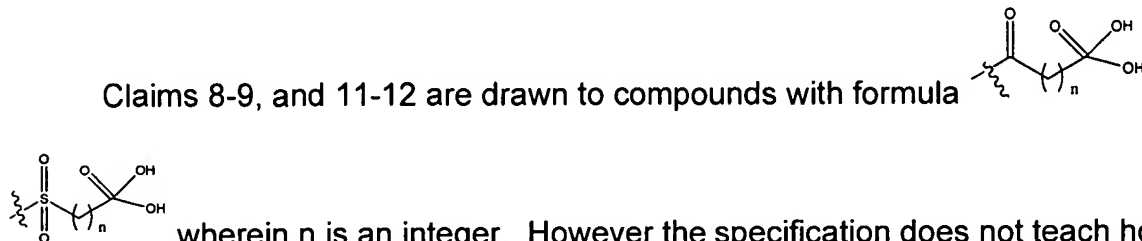
The following is a quotation of the first paragraph of 35 U.S.C. 112:

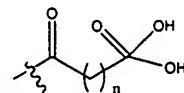
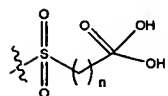
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2, 5-6, 8-9, 11-12, 14-15, and 17-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matters that were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.



Claims 1-2, and 5-6 are drawn to compounds with formula  wherein X, Y, and n are as defined in claims 1-2. However the specification does not teach how to make this class of compounds. The only working examples (9) on page 37 teach how to make 4-iodobutylphosphonic acid (2) and 6-phosphonhexanoic acid (1) that do not fit the instant formula.



Claims 8-9, and 11-12 are drawn to compounds with formula  and  wherein n is an integer. However the specification does not teach how to make this class of compounds. The only working examples (9) on page 37 teach how to make 4-iodobutylphosphonic acid (2) and 6-phosphonhexanoic acid (1) that do not fit the instant formula.

Claims 14-15, and 17-18 are drawn to compounds described in claims 14 and 15. However the specification does not teach how to make this class of compounds. The only working examples (9) on page 37 teach how to make 4-iodobutylphosphonic acid (2) and 6-phosphonhexanoic acid (1) that do not fit in the definition of the compounds.

On line 1 page 25 of the specification, the Applicants state that “ Another set of compounds that have been **designed** have a formula...”, which is not enough to demonstrate that the Applicants possess the invention.

Claims 3-4, 10, and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matters that were not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. A pharmaceutical composition for treating microbial infections comprising a therapeutically effective amount of an agent wherein the agent is selected from the compounds of claims 1-2, 5-6, 8-9, 11-12, 14-15, and 17-18. The subject matters (compounds) was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, therefore, the compositions in claims 3-4, 10, and 16 do not enable.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 8, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The factor “n” is defined as an integer, which is any one of a set of unlimited numbers.

Claim Objections

Claims 5-6, 11-12, and 17-18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claims. The products claims 5-6 are duplicates of claims 1-2. The claims relate to compounds not a method for intending to use. For the same reason, claims 11-12, and 17-18 are objected. Applicants are required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Conclusion

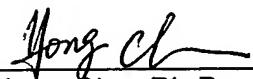
No claims are allowed.


Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Chu whose telephone number is 571-272-5759. The examiner can normally be reached on 7:00 am - 3:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Yong Chu, Ph.D.
Patent Examiner
Art Unit 1626

KAMAL A. SAEED, PH.D.
PRIMARY EXAMINER

for Joseph M. McKane
Supervisory Patent Examiner
Art Unit 1626